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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,434	04/23/2001	Carole Le Berre	01088	1053
23338 7	7590 10/03/2003		EXAM	INER
DENNISON, SCHULTZ & DOUGHERTY			PUTTLITZ, KARL J	
ARLINGTON	SON DAVIS HIGHWA . VA 22202	Y	ART UNIT	PAPER NUMBER
	,		1621	
			DATE MAILED: 10/03/2003	<sup>3</sup> 6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/807,434	LE BERRE ET AL	LE BERRE ET AL.			
Office Action Summary	Examiner	Art Unit				
	Karl J. Puttlitz	1621				
The MAILING DATE of this communication app Period for Reply	ars on the cover	sheet with the correspondence addr ss				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply	36(a). In no event, howe	ver, may a reply be timely filed imum of thirty (30) days will be considered timely.				
<ul> <li>If NO period for reply is specified above, the maximum statutory period w</li> <li>Failure to reply within the set or extended period for reply will, by statute,</li> <li>Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul> Status	cause the application to	become ABANDONED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on <u>23 A</u>	April 2001 .					
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	is action is non-fir	nal.				
3) Since this application is in condition for alloward closed in accordance with the practice under a Disposition of Claims						
4) ☐ Claim(s) <u>1-30</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	Will from Considere					
6) Claim(s) <u>1,2,5,6,8 and 9</u> is/are rejected.						
7) Claim(s) <u>3,4,7 and 10-30</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirer	ment.				
Application Papers	·					
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accep	oted or b)☐ objecte	ed to by the Examiner.				
Applicant may not request that any objection to the	- ' '					
11)☐ The proposed drawing correction filed on	_is: a)□ approve	d b) disapproved by the Examiner.				
If approved, corrected drawings are required in rep	•	ion.				
12) The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13)⊠ Acknowledgment is made of a claim for foreign	priority under 35	U.S.C. § 119(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents	<ol> <li>Certified copies of the priority documents have been received.</li> </ol>					
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the prior application from the International But</li> <li>* See the attached detailed Office action for a list</li> </ul>	reau (PCT Rule 1	7.2(a)).				
14) Acknowledgment is made of a claim for domestic	c priority under 35	5 U.S.C. § 119(e) (to a provisional application).				
a) ☐ The translation of the foreign language pro 15)☐ Acknowledgment is made of a claim for domesti	• •					
Attachment(s)	<del>-</del>					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3	5)	Interview Summary (PTO-413) Paper No(s)  Notice of Informal Patent Application (PTO-152)  Other:				

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#### **DETAILED ACTION**

## **Arrangement of the Specification**

Applicant is requested to conform the Specification to the requirements set forth in M.P.E.P. § 608.01(a) and 37 C.F.R. 1.77 for arrangement of applications.

Appropriate correction is required.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

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The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. 2143

Claims 1, 2, 5, 6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/33759 to EASTMAN CHEMICAL COMPANY (WO '759) in view of GB 1234 641 (GB 641).

The claims are drawn to, inter alia, a process for the preparation of acetic acid, methyl acetate, or both, in a liquid phase reaction medium comprising carbonylation of methanol, isomerization of methyl formate or both, in the presence of water, a solvent, a homogeneous catalyst comprising iridium and a halogen-containing promoter, and carbon monoxide, wherein the catalyst also comprises platinum. See claim 1.

WO '759 teaches a process carbonylation of methanol by contacting methanol, a halide and carbon monoxide with a supported catalyst comprising iridium and a second component, including platinum. See page 1.

The preferred catalyst contains from 0.01 to 10 weight percent of each metal.

See Page 11. Water is present. See, for example page 11, lines 28-29.

The difference between the process of the rejected claims and that described in WO '759 is that the process recited in the rejected claims is in the vapor phase. It is for this proposition that the examiner applies GB '641. This reference also teaches a carbonylation process for the preparation of carboxylic acids from alcohols. See paragraph bridging columns on page 1. The process also includes a halogen promoter and ester. See page 6, lines 104-106. The process also incorporates a solvent, e.g., dimethylphthalate, see page 10, lines 118-121.

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Importantly, the process involves liquid phase embodiment, utilizing the iridium-based catalyst, see, for example, paragraph bridging pages 8 and 9, example 34.

Accordingly, one of ordinary skill would have been motivated to modify the vapor phase process to include a liquid phase process because GB '641 teaches a liquid phase process using an iridium-based carbonylation catalyst for the conversion of methanol to methyl acetate. Therefore, the combination of WO '759 and GB 641 renders the process recited in the rejected claims prima facie obvious because it teaches this process with a reasonable expectation success. See M.P.E.P. § 2143 (discussing the requirement that a combination of references yeild a reasonable expectation of success).

## Allowable Subject Matter

Claims 3, 4, 7 and 10-30 are allowable outside of depedance on rejected claims. Accordingly, these claims are held as objected.

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Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Karl J. Puttlitz whose telephone number is (703) 306-

5821. The examiner can normally be reached on Monday-Friday (alternate).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Johann Richter can be reached on (703) 308-4532. The fax phone number

for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 308-

1235.

Karl J. Puttlitz

Assistant Examiner

Johann R. Richter, Ph.D., Esq.

Supervisory Patent Examiner

Biotechnology and Organic Chemistry Art Unit 1621

703-308-4532